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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,199	02/05/2002	Leo Gagilardi	CM-2501	7093

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EXAMINER

KUMAR, PREETI

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/068,199

Applicant(s)

GAGILARDI ET AL. 

Examiner

Preeti Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-17 are pending.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 3-17 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Terry et al. (US 5,259,848).

Terry et al. teach a method to remove stubborn stains is provided that includes application of an ammonium salt, preferably ammonium bicarbonate or ammonium

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carbonate, in combination with a peroxide and a fluorinated alkyl sulfonic acid. A major advantage of the method is that the solution is strong enough to remove coffee and tea stains yet sufficiently mild that it does not damage the carpet or pose a risk of danger to the person treating the stain. See col.2, ln.28-36. Many types of compositions are sold to remove stains from carpet and textiles. Common components of these stain removing solutions are trichloroethane, toluene, petroleum naphtha, methylene chloride, xylene and derivatives of xylene, surfactants, ethoxylates, sulfates and detergents. These are commonly applied in a fluorocarbon aerosol. See col.1, ln.50-60.

Specifically regarding claims 3-7 and 14, Terry et al. teach that the surfactant can be a cationic, nonionic, or anionic compound, including the salts of sulfated fatty alcohols, salts of alkyl aromatic sulfates, ethoxylated amines, quaternary amines, ethoxylated fatty alcohols, ethoxylated alkyl phenols, and ethoxylated quaternary amines. Terry et al. teach that a preferred surfactant is a fluorinated alkyl sulfonic acid. The term "fluorinated alkyl" as used herein, refers to a C1 to C25 alkyl group in which at least two hydrogen atoms are replaced with fluorine. A suitable commercial product is Zonyl TBS fluorosurfactant, sold by E.I. DuPont de Nemours & Co., Inc., containing 30-35% perfluoroalkyl sulfonic acid, ammonium salt, and 2-4% acetic acid. Coordinate salts include any salt of the sulfonic acid that does not adversely affect the performance of the acid in the stain removing solution, including the ammonium, sodium, or potassium salt. The fluorinated alkyl sulfonic acid reduces the later wetting of the fiber surface by minimizing chemical contact between the surface and substances that can oil the fiber, making the substance easier to remove. When used on nylon (polyamide) fiber, it may

also impart stain resistance to the fiber by ionically bonding to terminal amine sites, preventing the later attachment of staining acid dyes such as those found in colored fruit and soft drinks. Other preferred fluorocarbon surfactants are perfluoro aliphatic oxybenzene sulfonic acid salts. See col.4, ln.30-60.

Specifically regarding claims 8-10, Terry et al. teach a source of peroxide as an oxidant in a solvent. The preferred peroxide is hydrogen peroxide because it does not leave a residue on the fiber, as it breaks down to volatile products on reaction with the ammonium salt. Other peroxides that can be used are water soluble organic peroxides, such as t-butyl hydroperoxide, and inorganic peroxides. Other oxidants such as ammonium perchlorate and ammonium persulfate can also be used in place of peroxide. Any concentration of peroxide can be used that is effective to remove stains and that does not damage the fiber or any material that it is attached to. The concentration of peroxide is preferably between 3% and 35%. See col.5, ln.1-20.

Specifically regarding claims 11-12, Terry et al. teach that a preferred solvent is water or a mixture of water and alcohol. Alcohols facilitate the penetration, or "wetting out" of solution into the yarns. Preferred alcohols are the lower molecular weight alcohols, such as methyl, ethyl, propyl, isopropyl, isobutyl, sec-butyl, and t-butyl alcohol. See col.3, ln.49-55.

Terry et al. illustrate the removal of coffee stains from nylon carpet in example 3. A coffee stain on nylon carpet is removed with the following procedure. One part by weight of the Part A solution is mixed with one part by weight of the Part B solution as prepared in Example 1. After most of the coffee residue from the spill has been

removed from the carpet fiber, the stain removing solution is applied from a spray bottle, taking care to saturate the stain without overwetting the carpet. The solution is allowed to remain on the carpet until either the stain has been removed, or until the area has dried. If the stain persists, repeat the procedure. The coffee stain is substantially removed. Accordingly, the broad teachings of Terry et al. appear to anticipate the material limitations of the instant claims. See col.6,ln.10-25.

Alternatively, even if the broad teachings of Terry et al. are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at a process of cleaning a carpet comprising applying a liquid carpet cleaning composition as recited in claim 1 and further comprising a radical scavenger as recited in claims 15-16, because Terry et al. teach a carpet cleaning composition comprising fluorinated compounds and the optional use of a dry cleaning solvent such as toluene, which can function as radical scavenger.

6. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al. as applied to claims 1,3-17 above, and in view of Grippaudo et al. (US 6,403,547).

Terry et al. are relied upon as set forth above. However, Terry et al. do not specifically teach the use of a vacuum cleaner to partially remove the composition as recited by the instant claim 2.

Grippaudo et al. teach a process of cleaning a carpet with a liquid composition comprising a peroxygen bleach and an N-vinyl polymer, said process comprising the steps of applying said composition to the surface of the carpet and leaving said composition to dry onto the carpet and further comprises the step of removing said

composition. The carpet cleaning composition provides carpet cleaning and/or carpet anti-resoiling benefits. See abstract and col.2, ln.35-50. Grippaudo et al. teach that the composition is applied onto the carpet in the form of a spray of droplets using spray dispensers that may be manually or electrically operated. See col.2, ln.60-col.3, ln.60. The composition is left to dry until it has combined with dirt and has been changed into dry residues. The composition is then removed from the carpet by vacuum cleaning. See col.4, ln.38-45.

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to modify the teachings of Terry et al. to use a vacuum cleaner to remove the composition, because the teachings of Grippaudo et al. illustrate the use of a vacuum cleaner to remove carpet cleaning composition and further Terry et al. provide motivation to remove the cleaning composition after the stain has been removed or the area being cleaned has dried.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above. Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

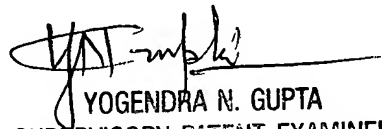
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 703-305-0178. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-872-9309.

PK  
January 25, 2003

Preeti Kumar  
Examiner  
Art Unit 1751

  
YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
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